carboxylate may be from about 15 to about 70% and, likewise, the amount of zinc contributed by the zinc chloride may be from about 30 to about 85% of the total amount of zinc. It is preferred, however, to use combinations of the carboxylate and chloride such that from about 35 to about 60% of the zinc ion is contributed by the carboxylate and from about 40 to about 65% is contributed by the chloride. The beneficial effects of an epoxy or phosphite co-stabilizer are most pronounced when the higher levels of zinc chloride, i.e, contributing between 65 and 85% of the zinc ion, are used.

The number of carbon atoms in said zinc carboxylate is suitably from 2 to 22, preferably from 8 to 18. Examples of the carboxylic acids from which the carboxylates originate include aliphatic and aromatic acids such as acetic, propionic, butyric, n-octanoic, 2-ethylhexanoic, dodecanoic, myristic, oleic, stearic, benzoic, phenylacetic, and other aromatic acids. Zinc octanoate, zinc 2-ethylhexanoate, zinc palmitate, zinc laurate, zinc oleate, and zinc stearate are particular examples of the carboxylates that are useful in the polymer composition of this invention. Mixtures of the carboxylates are useful, also.

From 0-30% of the epoxy compound, based on the weight of the halogen-containing polymer, may be used as co-stabilizers in the compositions of this invention. Examples of the epoxy compounds suitable for the purposes of this invention include epoxidized soya bean oil, epoxidized lard oil, epoxidized olive oil, epoxidized linseed oil, epoxidized castor oil, epoxidized peanut oil, epoxidized corn oil, epoxidized tung oil, epoxidized cottonseed oil, epichlorhydrin/bis-phenol A resins, phenoxy-propylene oxide, butoxypropylene oxide, epoxidized neopentylene oleate,

glycidyl epoxystearate, epoxidized olefins, epoxidized glycidyl soyate, dicyclopentadiene dioxide, epoxidized butyl toluate, styrene oxide, dipentene dioxide, glycidol, vinyl cyclo-hexene dioxide, glycidyl ether of resorcinol, glycidol ether of hydroquinone, glycidyl ether of 1,5-dihyroxy-naphthalene, epoxidized linseed oil fatty acids, allyl glycidyl ether, butyl glycidyl ether, cyclohexane oxide, 4-(2,3-epoxypropoxy) acetophenone, mesityl oxide epoxide, 2-ethyl-3-propyl glycidamide, glycidyl ethers of glycerine, pentaerythritol and sorbitol, and 3,4-epoxycyclohexane-1,1-dimethanol bis-9,10-epoxystearate.

The organic phosphites that are suitable as co-stabilizers for the purposes of this invention contain one or more, up to a total of three, aryl, alkyl, aralkyl and alkaryl groups, in any combination. The term "trialkylaryl" is inclusive of alkyl, aryl, alkaryl and aralkyl phosphites containing any assortment of alkyl, aryl, alkaryl and aralkyl groups. Triphenyl phosphite, tricresyl phosphite, tri(dimethylphenyl) phosphite, tributyl phosphite, trioctyl phosphite, tridodecyl phosphite, octyl diphenyl phosphite, dioctyl phenyl phosphite, tri(octyl-phenyl) phosphite, tri(nonylphenyl) phosphite, tribenzyl phosphite, butyl dicresyl phosphite, octyl di(octyl-phenyl) phosphite, tri(2-ethyl-hexyl) phosphite, tritolyl phosphite, tri(2-cyclohexylphenyl) phosphite, tri-alpha-naphthyl phosphite, tri(phenylphenyl)phosphite, and tri(2-phenylethyl) phosphite are exemplary. The organic phosphites are used in an amount of from 0 to 10% on a weight basis.

For the purposes of this invention, metallic-based stabilizers are defined as being metal salts and organometallic salts other than zinc salts. For the purposes

of this invention, metal salts are defined to include oxides, hydroxides, sulfides, sulfates, chlorides, bromides, fluorides, iodides, phosphates, phenates, perchlorates, carboxylates, and carbonates. The metal salt stabilizers are exemplified by barium, strontium, calcium, tin, magnesium, cobalt, nickel, titanium, antimony, and aluminum salts of hydrochloric acid, sulfuric acid, phenols, aromatic carboxylic acids, fatty acids, epoxidized fatty acids, oxalic acid, acetic acid, and carbonic acid. Calcium stearate, calcium 2-ethylhexanoate, calcium octoate, calcium oleate, calcium ricinoleate, calcium myristate, calcium palmitate, calcium laurate, barium laurate, barium di(nonylphenolate), barium stearate, and magnesium stearate are examples of suitable salts along with tin stearate, aluminum stearate, and hydrotalcite.

The amount of the metallic-based stabilizer is from 0 to about 2%, preferably 0.01-1% by weight of the halogen containing resin.

Conventional organometallic stabilizers include the organotin carboxylates and mercaptides. Such materials include butyltin tris dodecyl mercaptide, dibutyltin dilaurate, dibutyltin didodecyl mercaptide, dianhydride tris dibutylstannane diol, dihydrocarbontin salts of carboxy mercaptals such as those set forth in Hechenbleikner et al.(U.S. Pat. No. 3,078,290). There can be included any of the vinyl chloride resin stabilizers set forth in Salyer (U.S. Pat. No. 2,985,617).

Monosulfides and/or polysulfides of the organotin mercaptides of carboxylates and/or mercaptoalkyl carboxylates and of alkyl thioglycolates are also suitable as metal based stabilizers in the compositions of this invention for